

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Connect America Fund – Alaska Plan)	WC Docket No. 16-271
)	
Information Collection Being Reviewed by the)	OMB 3060-1228
Federal Communications Commission;)	
Connect America Fund – High Cost Portal)	
Filing)	

**COMMENTS OF ALASKA TELEPHONE ASSOCIATION ON PROPOSED
INFORMATION COLLECTION REQUIREMENTS**

I. INTRODUCTION AND SUMMARY

Alaska Telephone Association (“ATA”), on behalf of its members, submits these comments in response to the Commission’s Paperwork Reduction Act (“PRA”) Notice regarding the collection of middle mile information from participants in the Commission’s Alaska Plan for high-cost support.¹ The proposed information collection, as described in a Bureau-level Public Notice,² does not meet the requirements of the PRA in several respects. The collection is unnecessarily broad. While the Commission’s stated intent was to collect middle mile information sufficient to permit re-evaluation at specific times of the Alaska Plan participants’ individual commitments to deploy broadband, the proposed collection would also require

¹ See Information Collection Being Reviewed by the Federal Communications Commission, 82 Fed. Reg. 44,785 (Sept. 26, 2017) (“PRA Notice”).

² *Wireline Competition Bureau and Wireless Telecommunications Bureau Release Instructions for Filing Terrestrial Middle Mile Network Maps*, Public Notice, 32 FCC Rcd. 6863 (Wireline Comp. and Wireless Telecomm’n’s Burs. 2017) (“Middle Mile Mapping PN” or “Notice”).

reporting of extensive last-mile facilities. In addition to being overbroad, the accuracy requirements are so granular as to require manual surveys in many cases, both adding time and expense and eliminating the ability to use more convenient information technology. In these ways, the information is not “necessary” as the PRA requires,³ nor does it reflect an effort to “reduce[] to the extent practicable and appropriate the burden”⁴ of the collection or “minimize the burden of the collection of information on those who are to respond, including through the use of automated collection techniques or other forms of information technology.”⁵ Nor does it attempt to maximize “the existing reporting and recordkeeping practices of those who are to respond.”⁶

Fortunately, the Commission can modify the proposed collection by granting ATA’s Petition for Reconsideration on these issues before submitting the proposed information collection to the Office of Management and Budget.⁷ ATA is pleased to have begun productive discussions with Commission staff on ways to collect the information needed to meet the requirements laid out in the *Alaska Plan Order*,⁸ without burdening participants with unnecessary and overly granular requirements. ATA looks forward to continued discussions to resolve these concerns.

³ 44 U.S.C. § 3506(c)(2)(A)(i).

⁴ *Id.* § 3506(c)(3)(C).

⁵ *Id.* § 3506(c)(2)(A)(iv).

⁶ *Id.* § 3506(c)(3)(E).

⁷ See Petition for Reconsideration of Alaska Telephone Association, WC Docket No. 16-271 (filed Oct. 10, 2017) (“Petition for Reconsideration”). A copy of the Petition for Reconsideration is attached to these comments.

⁸ *Connect America Fund et al.*, Report and Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd. 10,139 (2016) (“*Alaska Plan Order*”); see Letter from Christine O’Connor, Executive Director, Alaska Telephone Association, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 16-271 (filed Nov. 20, 2017).

II. THE MAPPING REQUIREMENTS AS CURRENTLY WRITTEN VIOLATE THE PRA

ATA explained in its Petition for Reconsideration what needs for middle mile information the Commission detailed in the *Alaska Plan Order*. Rather than repeat those here, ATA incorporates the contents of its Petition by reference into these comments. In summary, the *Alaska Plan Order* acknowledged that many communities in remote Alaska are served by satellite or microwave-based middle mile facilities, rather than by fiber, and approved Alaska Plan participants' tailored performance commitments that take these limitations into account. At the same time, the Commission adopted *limited* data collection and reporting requirements with respect to middle mile connections to these communities to ensure that the Commission has sufficient information to re-assess the performance commitments of Alaska Plan participants at designated times and to monitor ongoing compliance with requirements triggered by changes in middle mile facilities.

The details of the data collection as adopted by the Bureaus, however, go beyond what is needed to accomplish the Commission's goals and are not appropriately tailored to the relatively simple task of ascertaining the nature of middle mile facilities connecting a particular community to its connection to the nationwide internet backbone. As mandated by the Bureaus, the collection includes not only middle mile facilities (sometimes referred to as backhaul with reference to both fixed and mobile architectures) but many last-mile facilities, such as those connecting any school or village health clinic (defined as "anchor institutions"), no matter how small. End user locations must be surveyed and geocoded, and all locations must be measured and links described to within 7.6 meters of accuracy, which in most cases will require a site visit and survey as well as precise measurement along the span of the link.

These requirements are inconsistent with the PRA in several ways.

First, some of the requirements do not reflect that the Commission “has taken every reasonable step to ensure that the proposed collection of information . . . is the least burdensome necessary for the proper performance of the agency’s functions to comply with legal requirements and achieve program objectives.”⁹ The mapping requirements go well beyond what the Commission needs to assess performance commitments when it has the opportunity to review them. Links and nodes serving end users and cell towers do not inform what other services might be available to a community when those links and nodes sit behind facilities (like satellite links) that connect the community to the outside world.

Second, the mapping requirements make no effort to “reduce[] to the extent practicable and appropriate the burden” on filers.¹⁰ As described above and in ATA’s Petition for Reconsideration, the burden is unnecessarily high due to the requirements to report end user locations and to map to 7.6 meters of accuracy. At the same time, by requiring mapping to be done to such a granular level, the proposed collection does not “minimize the burden of the collection of information on those who are to respond, including through the use of automated collection techniques or other forms of information technology.”¹¹ To map many of the locations specified in the *Public Notice*, Alaska Plan participants would need to visit the site to obtain coordinates to within 7.6 meters. Yet for most or all locations, desktop tools such as Google Earth and other mapping databases and tools could provide accuracy to a level of granularity sufficient for determining whether a community’s broadband service is constrained by the facilities available to connect it to the outside world.

⁹ 5 C.F.R. § 1320.5(d)(1)(i).

¹⁰ 44 U.S.C. § 3506(c)(3)(C); 5 C.F.R. § 1320.9(c).

¹¹ 44 U.S.C. § 3506(c)(2)(A)(iv).

Third, by requiring the collection of points outside the providers' core networks (such as anchor institutions) and requiring accuracy to 7.6 meters, the mapping requirements as currently written are not "consistent and compatible, to the maximum extent practicable, with the existing reporting and recordkeeping practices of those who are to respond."¹² As documented in ATA's Petition for Reconsideration and its attached declarations, filers do not necessarily maintain data on their own networks to 7.6 meters of accuracy; data regarding every anchor institution within their eligible service areas is even less likely to be maintained in the regular course of business. As these requirements go beyond what is necessary to implement the *Alaska Plan Order*, they are not necessary and are inconsistent with the Commission's obligation to rely on existing records "to the maximum extent practicable."

Fourth, the timing of the proposed collection would increase the burden substantially. As ATA explained in its Petition for Reconsideration, the Alaska winter is not conducive to manual surveys—lack of daylight, the necessity of air travel, and harsh weather conditions all increase the time, expense, and risk involved in visiting sites to obtain geo-coordinates.

Finally, the estimated burden in the *PRA Notice* is entirely unrealistic. The notice suggests that every filer will need 8 to 60 hours to complete filings and will incur no costs. Even if all data gathering could be done using desktop tools, gathering (by visual identification) the latitude and longitude of every anchor institution in every remote Alaska village is a manual, labor-intensive process. Add onto that labor the time (or consultant expense) to format the data and prepare it for submission and 8 to 60 hours quickly seems like a very small amount. If filers must also conduct village-by-village site visits (by air, since most communities are not connected by road), that adds to the collection time and expense tremendously.

¹² *Id.* § 3506(c)(3)(E); 5 C.F.R. § 1320.9(e).

III. CONCLUSION

ATA fully supports the Commission's need for middle mile maps to enforce the *Alaska Plan Order* and revise performance commitments, when appropriate, to reflect changes in the connectivity available to a community. ATA looks forward to continuing to work with the Commission to fashion a mapping plan that meets the needs of the *Alaska Plan Order* while minimizing the burden on Alaska Plan participants.

Respectfully submitted,

/s/

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November 27, 2017

Attachment

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PETITION FOR RECONSIDERATON OF ALASKA TELEPHONE ASSOCIATION

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I. INTRODUCTION AND SUMMARY

Pursuant to Section 1.106 of the Commission’s rules,¹ Alaska Telephone Association (“ATA”) seeks reconsideration of certain mapping reporting requirements announced by the Wireline Competition and Wireless Telecommunications Bureaus.² The *Alaska Plan Order* acknowledged that many communities in remote Alaska are served by satellite or microwave-based middle mile facilities, rather than by fiber, and approved Alaska Plan participants’ tailored performance commitments that take these limitations into account. At the same time, the Commission adopted limited data collection and reporting requirements with respect to the middle mile connections to these communities to ensure that the Commission has sufficient information to re-assess the performance commitments of Alaska Plan participants at designated intervals and to monitor ongoing compliance with requirements triggered by changes in middle mile. ATA members understand and respect these obligations and are committed to providing the Commission with the information it needs.

The details of the data collection as adopted by the Bureaus, however, go beyond what is needed to accomplish the Commission’s goals and are not appropriately tailored to the relatively simple task of ascertaining the nature of middle mile facilities connecting a particular community to its connection to the nationwide internet backbone. As mandated by the Bureaus, the collection includes not only middle mile facilities but many last mile facilities, such as those connecting any school or village health clinic (defined as “anchor institutions”), no matter how

¹ 47 C.F.R. § 1.106.

² *Wireline Competition Bureau and Wireless Telecommunications Bureau Release Instructions for Filing Terrestrial Middle Mile Network Maps*, Public Notice, 32 FCC Rcd. 6863 (Wireline Comp. and Wireless Telecomm’n Burs. 2017) (“*Middle Mile Mapping PN*” or “*Notice*”).

small. These last mile facilities are not relevant to determining the nature and capacity of the facilities connecting the community to the internet, and go beyond what the Commission instructed.

Moreover, the collection of the information would be extremely expensive and burdensome—mandating a level of accuracy completely unnecessary for monitoring middle mile facilities to a *community*, rather than a specific site. Not only does the *Middle Mile Mapping PN* require end user locations to be surveyed and geocoded, but all locations must be measured and links described to within 7.6 meters of accuracy, which in most cases will require a site visit and survey as well as precise measurement along the span of the link. Alaska Plan participants would rather put their resources towards improving their networks and services in fulfillment of their commitments.

Even if the collection were simple, the March 1, 2018 deadline is unrealistic given Alaska’s unique climate and geography. The Alaska winter has nearly begun. Alaska Plan participants cannot collect the required data before March without extreme measures potentially putting data-gathering personnel at risk. Much of the data would need to be gathered in the field, yet travel and outdoor work in remote Alaska can be extremely hazardous or impossible in the dark winter months.

ATA is happy to work with the Commission to develop a reasonable data collection that meets the Commission’s needs while imposing only reasonable burdens on Alaska’s carriers and providing sufficient time to gather and format the data.

II. BACKGROUND

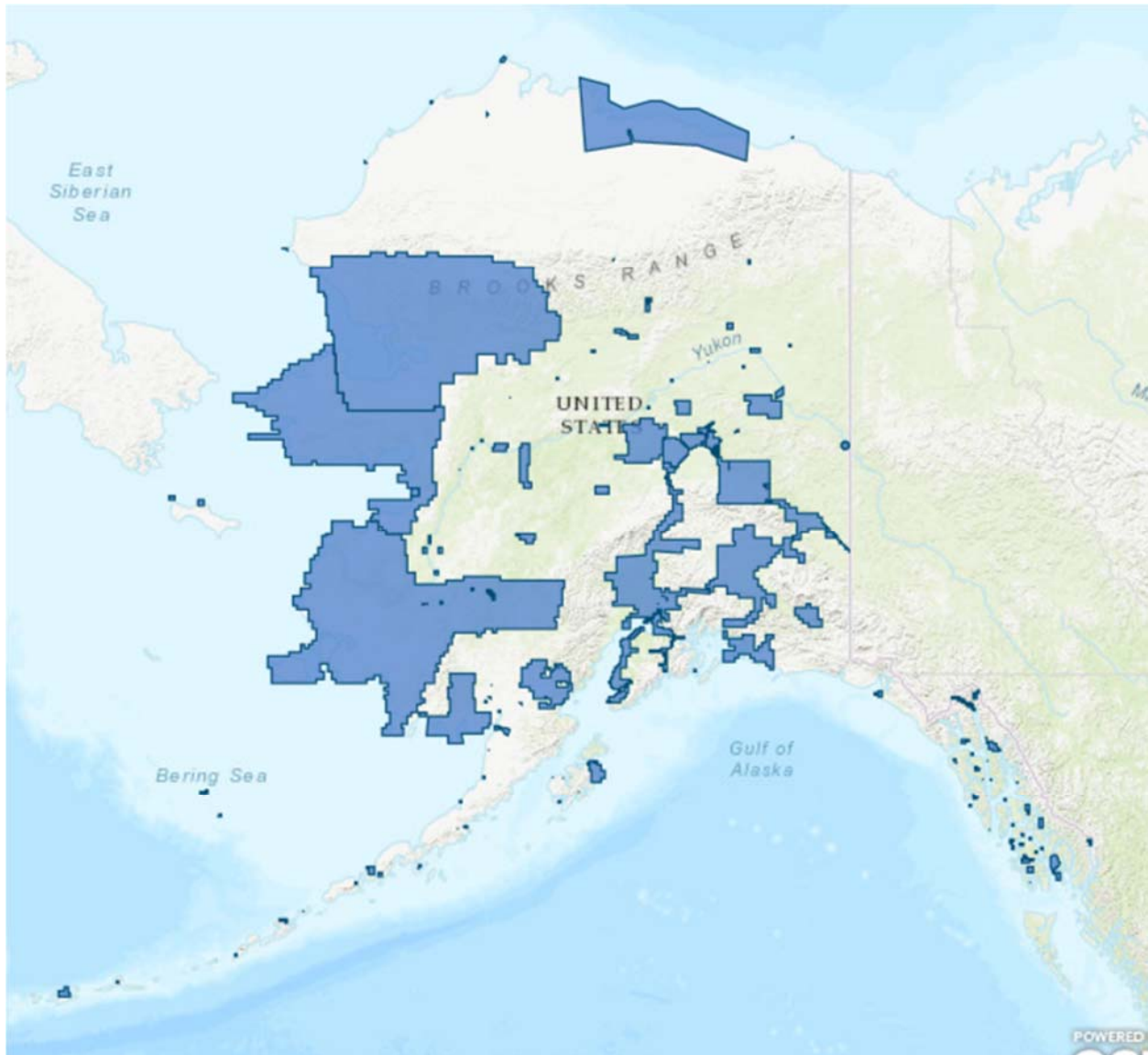
In August 2016, the Commission adopted the *Alaska Plan Order* based on a consensus proposal from ATA “designed to maintain, extend, and upgrade broadband service across all

areas of Alaska served by rate-of-return carriers and their wireless affiliates.”³ The carriers that opted to participate in the Alaska Plan each committed to maintain and upgrade service within their service areas in exchange for receiving a fixed amount of high-cost support over ten years.

The Alaska Plan correctly recognizes the unique challenges of deploying and operating communications networks in remote Alaska. The population—and therefore the networks needed to provide service to the population—are not evenly scattered throughout the State, and many communities are not located on a road system.⁴ Accordingly, fiber networks are geographically limited to a central core along the State’s highways and the Alaska oil pipeline, and some communities located near spurs from the undersea cable route between Alaska and Seattle/Portland. Communities not connected by fiber are served by microwave or satellite-based networks. Outside of the three most urban centers of Anchorage, Fairbanks, and Juneau—all of which are on fiber middle mile networks—the residents live in one of the State’s regional centers, with a few thousand residents, or in villages, which are often inhabited by a few hundred people or fewer. Outside of the areas on the highway network, these regional centers and villages are surrounded by uninhabited areas, and physically isolated from one another. The study area boundaries for Alaska reflect this pattern to some degree:

³ *Connect America Fund et al.*, Report and Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd. 10,139, 10,140 ¶ 3 (2016) (“*Alaska Plan Order*”) (footnote omitted).

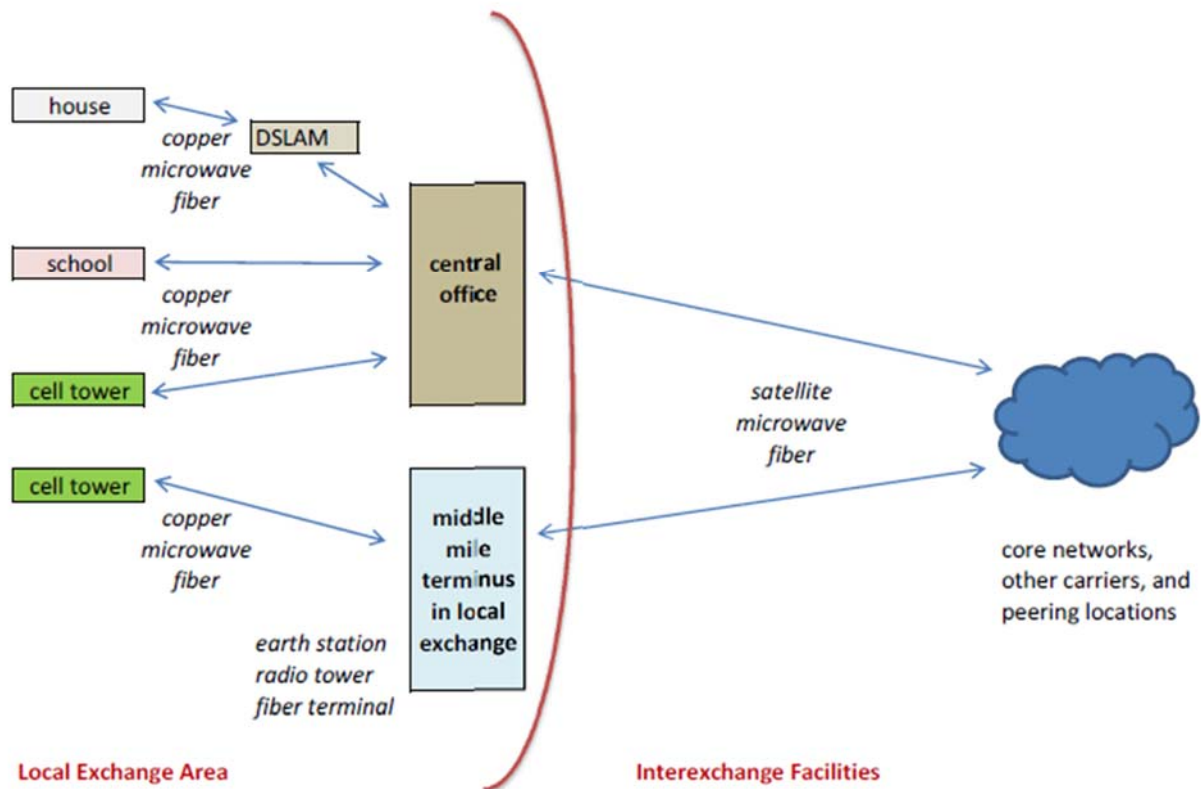
⁴ “In Alaska, the majority of municipalities are not connected to the road system (86%). Only a minority are connected by road to other places (14%). Historically, urban and rural communities located either along the coast or on a river as waterways served as the primary means to transport people and goods. Today, nearly all of Alaska’s municipalities are located either on a river (41%), on the coast (36%), or both (24%).” Alaska Mapping Business Plan, State of Alaska, Department of Commerce, Community, and Economic Development, Division of Community and Regional Affairs, Appendix 2 at 48, <https://www.commerce.alaska.gov/web/Portals/4/pub/AKMBPA2.pdf>.



Source: FCC Study Area Boundaries, <https://www.fcc.gov/maps/study-area-boundaries> (as submitted by incumbent LECs through April 27, 2017)

For wireline networks, a village is typically served by one central office with last mile facilities extending to end user locations. Villages with mobile service usually have one or two towers serving the village, with a wired or wireless connection from the tower to a remote mobile switching center or other mobile node in the same community. The central office or mobile node is then connected to the outside world via interexchange facilities, or middle mile. Those interexchange facilities are in some cases fiber, but often are microwave fixed wireless or

satellite connections. The following illustrates a few representative examples of village network architecture:



The level of broadband services required under Alaska Plan commitments for a particular community depend on what middle mile facilities connect that village to the outside world. Last mile facilities—while also relevant to broadband speed and performance—cannot overcome the limitations of the middle mile facilities on which they rely to transmit communications to and from the internet. When a village’s only middle mile connection is a satellite or microwave link, broadband speeds and capacity are necessarily limited. Were GCI, for example, to install a fiber link from its satellite earth station on St. George Island (in the middle of the Bering Sea) to the local school, the speed and performance of the school’s end-to-end connection to the internet would still be constrained by the capacity, throughput, and latency of the satellite link. The

Commission recognized this reality and accommodated it by allowing Alaska Plan participants to have individually crafted performance plans that take their middle mile situations into account.⁵

At the same time, the Commission wanted to ensure that, as new middle mile facilities become available, Alaska Plan participants' performance plans are appropriately adjusted to account for the new capabilities.⁶ To support the evaluation of these adjustments, the Commission required Alaska Plan participants to submit maps of the fiber and microwave middle mile facilities and to update them annually "if they have deployed middle mile facilities in the prior calendar year that are or will be used to support their service in eligible areas."⁷ The Commission did not include detailed filing instructions in the *Alaska Plan Order* but required participants to submit their maps "in a format specified by the Bureaus."⁸

On September 8, 2017, the Bureaus released the instructions for Alaska Plan participants to follow in submitting their maps. In addition to requiring middle mile information, the Bureaus instructed the Alaska Plan participants to submit the geolocation of every cell site, anchor institution "such as schools, libraries, medical and healthcare providers, community colleges, and other institutions of higher education," and locations where links to these connections terminate.⁹ These locations (in addition to actual middle mile locations) must be depicted within middle mile

⁵ *Alaska Plan Order* at 10,146 ¶ 17; *see also, e.g., id.* at 10,167 ¶ 86.

⁶ *See id.* at 10,148 ¶ 25 (requiring rate-of-return participants to meet broadband public interest obligations if backhaul facilities improve sufficiently); 10,158 ¶¶ 61-62 (directing the Wireline Competition Bureau to take improvements in middle mile infrastructure into account in evaluating rate-of-return carrier performance commitments at set intervals); 10,172 ¶ 102 (requiring mobile participants to upgrade certain performance commitments in response to improvements in middle mile).

⁷ *See id.* at 10,158 ¶ 60, 10,172-73 ¶ 102.

⁸ *Id.*

⁹ *Middle Mile Mapping PN* at 6864.

“links” that are identified to within 7.6 meters (about 25 feet) of accuracy.¹⁰ The instructions also require that all this information be collected, formatted, and submitted by March 1, 2018 (assuming that the Bureaus receive approval from the Office of Management and Budget before then).¹¹

On September 26, 2017, the Commission published in the Federal Register a notice and request for comment on the proposed information collection, as required by the Paperwork Reduction Act (“PRA”).¹² ATA currently expects to participate in the PRA process but hopes that the Commission will consider revising its data collection before that process proceeds to the point of submitting the collection to the Office of Management and Budget for its review.

III. DISCUSSION

The Bureaus’ instructions as currently written are overbroad, and thus unduly burdensome, in several ways. First, the instructions go beyond any reasonable interpretation of “middle mile” to include last mile connections to individual end user locations that happen to be a medical office (apparently no matter how small), school, library, or other “anchor institution.” These last mile connections are not relevant to the Commission’s goals—to reassess whether changes in *middle mile* facilities warrant an update to an individual carrier’s performance plan for service to a *community*. Second, even though the purpose of reporting is to determine the

¹⁰ *Id.* at 6866. The instructions also specify that the latitude and longitude of individual locations must be reported to six decimal degrees, which in Alaska is less than three inches longitudinally. *Id.* at 6869. It is not clear how these standards work together.

¹¹ *Id.* at 6864.

¹² 82 Fed. Reg. 44,785 (Sept. 26, 2017). The instructions themselves do not appear to have been published in the Federal Register, and were not previously subject to a formal pleading cycle. To the extent that the Commission considers the *Notice* to be a final action in a rulemaking proceeding, ATA requests that the petition be considered to have been filed pursuant to 47 C.F.R. § 1.429.

nature of middle mile facilities connecting a community to the internet, the *Notice* requires that “middle mile” links be reported to within 7.6 meter accuracy—a standard suited to individual buildings rather than a village. The Public Notice does not explain why such a detailed level of reporting is necessary—which essentially precludes desktop estimation based on Google Earth or other tools. To reach that level of precision, Alaska Plan participants will need to perform field surveys. No doubt these are expensive for any communications provider, but in remote Alaska they require not only man-hours but extensive air travel. Finally, it will be difficult and unnecessarily risky for Alaska Plan participants to gather information from the field during the winter months, which is what would be required to have the data collected, formatted, analyzed, and submitted by the March 1, 2018 deadline.

ATA would be pleased to work with the Bureaus to craft a reasonable data collection that meets the Commission’s stated needs of assessing whether carriers’ performance plans need to be adjusted. The current instructions, however, go beyond what is necessary to meet that goal and impose unreasonable burdens on Alaska’s remote carriers.

A. The Mapping Requirements Go Beyond What the Commission Intended in the *Alaska Plan Order*

The Commission established the middle mile¹³ mapping requirement to support its “ongoing assessment of the performance commitments” of the Alaska Plan participants.¹⁴ As the

¹³ The *Alaska Plan Order* uses the terms “middle mile” and “backhaul” interchangeably, using both terms with reference to the infrastructure available to rate-of-return carriers as well as mobile wireless providers. We use the term “middle mile” for simplicity. *See, e.g., Alaska Plan Order* at 10,158 ¶ 60 (for rate-of-return carriers, stating that “[w]e also adopt a reporting requirement for newly deployed *backhaul*. We will require Alaska Plan participants to submit fiber network maps or microwave network maps . . . and to update such maps if they have deployed *middle mile facilities* in the prior calendar year”) (emphasis added).

¹⁴ *Alaska Plan Order*, at 10,173 ¶ 102.

Commission stated several times, the lack of adequate middle mile infrastructure affects the quality of the broadband services that rely on that infrastructure. Yet the Bureaus expanded the data collection to include *last mile* facilities.

There is no indication in the *Alaska Plan Order* that the Commission intended to deviate from the Commission's traditional meaning of the term "middle mile." In the Connect America Cost Model, for example, "middle mile" refers to "interoffice network or transport. It captures the routing from a Central Office to the point at which traffic is passed 'to the cloud.'"¹⁵ Similarly, the National Broadband Plan technical papers referred to "middle mile" as "the transport and transmission of data communications from the central office, cable headend or wireless switching station to an Internet point of presence."¹⁶ The Bureaus have expanded this understanding of the term without explanation and beyond the *Alaska Plan Order*.

This deviation is difficult to understand because no last mile facilities can provide services that are better than what the middle mile infrastructure can support. For example, some of the Alaska Plan mobile wireless participants have committed to provide LTE service in areas that rely on satellite backhaul. The expected speeds, therefore, range from 1 Mbps/128 kbps to 2 Mbps/500 kbps, as opposed to speeds of 10 Mbps for the same technology in areas served by fiber middle mile.¹⁷ The use of LTE in the last mile cannot compensate for the limitations of the slowest link between the user and the ultimate destination. Similarly, fiber last mile connections

¹⁵ *Wireline Competition Bureau Announces Availability of Version 4.1.1 of the Connect America Fund Phase II Cost Model*, Public Notice, DA 14-515, 29 FCC Rcd. 3884 (Wireline Comp. Bur. 2014), Attach.

¹⁶ *Connect America Fund et al.*, Notice of Inquiry and Notice of Proposed Rulemaking, 25 FCC Rcd. 6657, 6862 (2010) (OBI Technical Paper #1).

¹⁷ *See Wireless Telecommunications Bureau Approves Performance Plans of the Eight Wireless Providers That Elected To Participate In The Alaska Plan*, Public Notice, 31 FCC Rcd. 13,317 (Wireless Telecomm'n Bur. 2016).

from a central office to an end user location may have advantages of being more reliable than fixed wireless and lower cost to maintain than copper, but they cannot provide speed or capacity for Internet access beyond what the middle mile technology will support. The connection is only as capable as its weakest link.

There is therefore no reason to provide location information regarding the hundreds or thousands of end user locations and cell sites that are served by microwave and fiber last mile facilities.¹⁸ The *Notice* requires participants to report—to within 7.6 meters of accuracy—the locations of “anchor institutions,” including but not limited to “schools, libraries, medical and healthcare providers, community colleges, and other institutions of higher learning.”¹⁹ Thus, if the local school is connected by fiber to the central office, the location of the school must be provided even though that fiber loop has absolutely no bearing on what speeds or capacity the nearby middle mile facilities can support. Similarly, if a village is served with fixed wireless for local exchange access, the location of any dentist, chiropractor, or village public safety officer must be geolocated even if the only connection between that village and the outside world is via satellite, and therefore limited to the speeds and capacity (and latency) that satellite middle mile can support.

Cell site connections themselves similarly have no bearing on the middle mile limitations of an area. The Bureaus state that cell sites “serve as an initial aggregation point for traffic to be

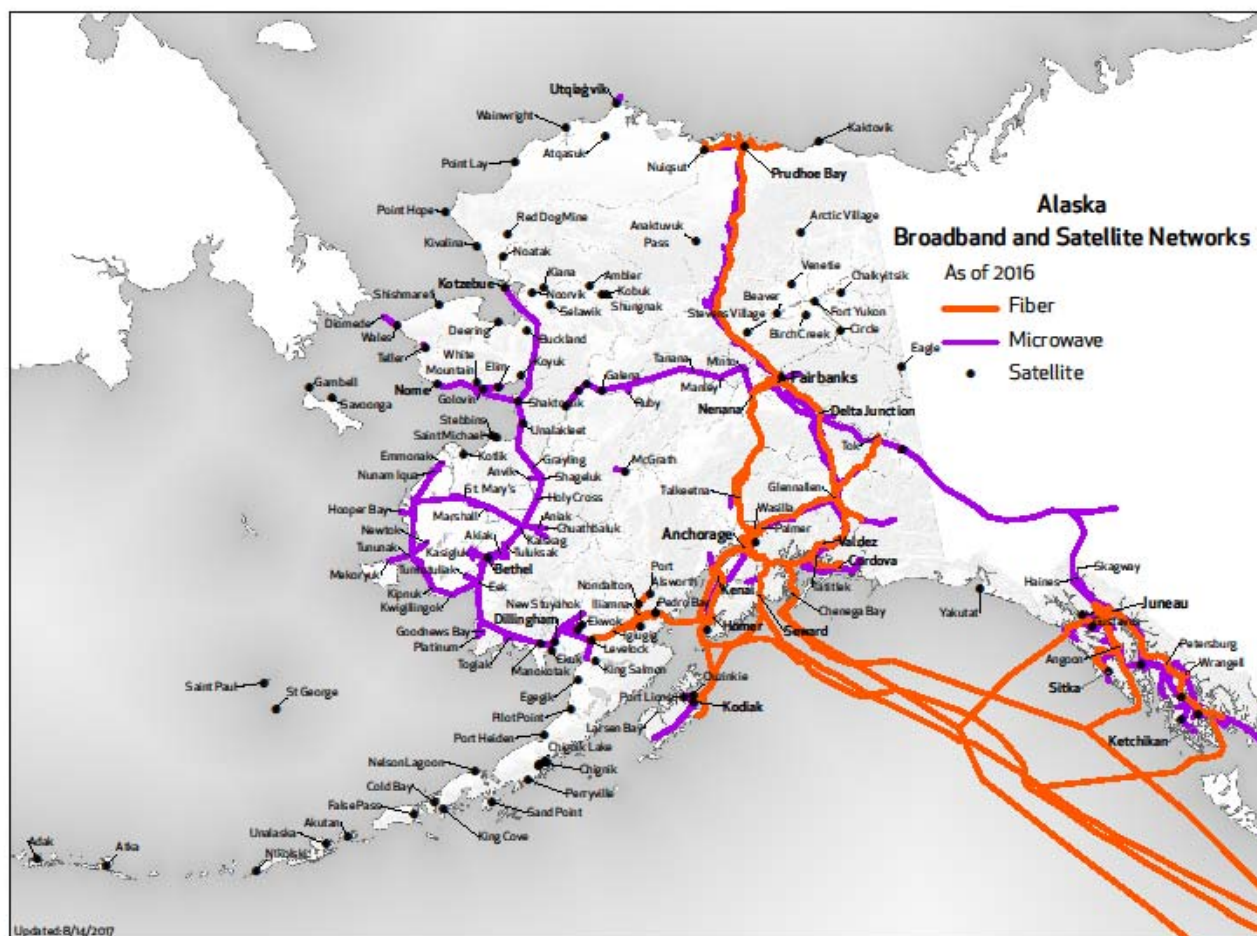
¹⁸ ATA reads the *Middle Mile Mapping PN* not to require reporting of locations served by copper or satellite, and only to require the reporting of middle mile facilities that the reporting ETC relies on to support services within its own eligible areas. To the extent that the Commission interprets the *Middle Mile Mapping PN* to require reporting of copper or satellite facilities or facilities that do not support the reporting ETC’s services within its eligible areas, ATA includes those requirements within its request for relief.

¹⁹ *Middle Mile Mapping PN* at 6865.

backhauled.”²⁰ This proves too much. A home’s or business’s Wi-Fi router is an initial aggregation point, transmitting the signals from the multiple devices within it to the modem and beyond to the cable headend, central office, or other first point outside the location. But that does not turn the connection from the Wi-Fi router to the first point outside the home or business into middle mile.

In addition, most cell sites are located within or near villages. This makes sense—that is where the users are most likely to be. The wireless service, therefore, suffers from the same limitations of the interexchange facilities serving the village as the fixed services do. Some cell sites are located not within villages but along highways, providing communications to travelers for convenience and public safety. These cell sites, however, are unlikely to serve much population, which is clustered in villages and not along highways. As such, any change in the facilities serving those towers is unlikely to have a significant impact on the Alaska Plan commitments, which are based on population served. Moreover, towers along highways, such as major roads connecting Anchorage, Fairbanks, and Juneau with the oil fields near the northern coast, are already more likely to be connected to fiber facilities, as there is fiber middle mile running along the rights-of-way:

²⁰ *Id.* at 6869.



Source: GCI.

In sum, the instructions go beyond any reasonable understanding of what the *Alaska Plan Order* required or what the term “middle mile” means. No purpose identified in the *Order* would be served by requiring the collection and reporting of the substantial number of end user and tower locations required by the instructions.

B. The Requirements Impose Excessive Burdens on Alaska Plan Participants

The *Middle Mile Mapping PN* imposes requirements that would be very expensive and burdensome to meet.²² ATA members will prepare detailed data regarding the burdens of the collection in response to the Commission's Public Notice seeking comment on the burdens, as required by the Paperwork Reduction Act.²³ Some ATA members have already determined that the burdens will be substantial, in most cases far more than the 8 to 60 hours per response that the Commission has estimated.²⁴

Members anticipate that collecting the data to the specified 7.6 meter accuracy will be a largely manual process requiring technicians to take survey equipment to the site. USAC recently acknowledged "[f]ield work can be time-consuming and expensive" in general.²⁵ Although USAC also noted that "desktop geolocation" can be unreliable in rural areas generally, that inaccuracy is much less of a concern if the goal—as here—is to determine the middle mile connections to a community rather than the last mile connections available to a particular building.²⁶ For ATA members, the number of hours required for survey work will vary depending on the number of villages that the Alaska Plan participant must survey, the mode of travel to the village and whether it is accessible by road, and the time of year during which the

²² See generally Attachment 1 (Declaration of Jimmy Sipes) and Attachment 2 (Declaration of Robert Himschoot).

²³ 82 Fed. Reg. 44,785 (Sept. 26, 2017). Comments in response to the Paperwork Reduction Act notice are due on November 27, 2017, but ATA members are already working to compile the necessary data.

²⁴ See *id.* at 44,786.

²⁵ See Universal Service Administrative Company, Geolocation Methods, at 3, 4 <https://www.usac.org/res/documents/hc/pdf/tools/HUBBGeolocationMethods.pdf>.

²⁶ *Id.*

data must be collected. Working in the winter months increases costs, as technicians must spend more time in each village to complete the survey during the few daylight hours. For example, TelAlaska serves the village of Fort Yukon. Fort Yukon is situated in east-central Alaska at 66 degrees north latitude. The northern latitude causes daytimes to be shorter: from November 12 to January 27 there are fewer than six hours of daylight, and from November 28 through January 11, there are fewer than four.²⁷ While technicians in the Lower 48 would have full work-days of daylight to survey a village, technicians in remote Alaska would need additional time (as well as weather conditions that permit surveying at all). In addition, some equipment may not function properly in extremely cold weather. The average high temperature in January in Bethel, for example, is 12 degrees Fahrenheit. In Kotzebue it is 4 degrees, and in Barrow it is -7 degrees.²⁸ Clearing roads and pathways of deep snow cover would also add to the total time on site.

While the Federal Register indicates that there are no costs other than man-hours, this is not correct. Members must travel to remote villages where they do not have permanent technical staff to perform the surveys. Travels costs in remote Alaska include the costs of traveling via small airplane to reach villages off the road systems, as well as lodging. Again, during the winter months, costs for meals and lodging will increase as work proceeds more slowly and winter weather causes travel delays.

Some members may need to purchase equipment or software in order to complete the surveys, adding additional costs to the collection. Finally, some members will need to hire

²⁷ See Sunrise Sunset-Fort Yukon, Alaska, <https://sunrise-sunset.org/us/fort-yukon-ak/2017/11>.

²⁸ U.S. climate data, <https://www.usclimatedata.com/climate/bethel/alaska/united-states/usak0028>, <https://www.usclimatedata.com/climate/kotzebue/alaska/united-states/usak0135>, <https://www.usclimatedata.com/climate/barrow/alaska/united-states/usak0025>.

consultants to perform the survey to the required degree of accuracy or generate shapefiles to the prescribed levels of precision, creating yet more costs.

Some members have generated initial cost estimates to complete the collection as prescribed. Costs will vary depending on how many communities a participant needs to survey, how much travel would be involved, and whether the carrier has the expertise and equipment in-house or will need to hire contractors. GCI estimates that gathering and reporting data for one village—including travel, lodging, man-hours to conduct the survey, and post-survey analysis and formatting—would cost approximately \$10,000. There are hundreds of communities and villages within the Alaska Plan eligible areas. ATA members will continue to refine their cost estimates, but it is clear that the costs of the collection will be very high.

The costs should not come as a surprise. Alaska Communications (“ACS”) has recently pointed out the challenges of collecting geolocation information for locations it upgraded using Connect America Phase I funds. As ACS stated:

[T]hese locations are remote, making access costly and hazardous most of the year. Some of these locations have no street address and are difficult to locate in the best of conditions. All are difficult and costly to reach much of the year, subject to temperature, ice, snow and unpredictable storms. Indeed, 524 of the locations are not accessible via road at all but require that technicians reach them via a charter flight or by snow-machine or boat. The remaining 1,855 locations, though on the road system, still are in remote areas accessible only when weather conditions permit . . . Winter storms, high winds and heavy precipitation can prevent visits to these remote locations for weeks on end.²⁹

²⁹ Petition for Clarification or, in the Alternative, Petition for Limited Waiver of the Requirement To Identify by Latitude and Longitude the Locations in Which Alaska Communications Deployed Broadband To Meet the Requirements of CAF Phase I, WC Docket No. 10-90, at 9-10 (filed Mar. 14, 2017).

The collection is clearly overly burdensome. The Bureaus' decision to expand the scope beyond middle mile has added substantial costs, yet data about last mile connections will not inform the Commission as it monitors remote Alaska for changes in middle mile infrastructure.

C. Surveying Remote Villages During Alaska's Winter Months Is Unnecessarily Hazardous and Expensive

The *Middle Mile Mapping PN* instructions and March 1, 2018 deadline are very poorly timed.³⁰ As explained, meeting the collection requirements will require extensive field work. In many cases, technicians and equipment will have to be flown in to remote villages to survey the area and collect coordinates. For obvious reasons, some carriers try to avoid sending their technicians into the field in the winter months, particularly in remote areas, unless it is necessary to address a critical infrastructure need.

It is not clear that providers could even gather the required data in time for the March 1 filing deadline. Weather conditions may not permit travel to remote villages on a schedule that allows all the necessary data to be collected, formatted, analyzed, and submitted. Moreover, technicians need sufficient daylight to properly identify locations and gather the coordinates, yet daylight during the Alaska winter is scarce. A village in central Alaska may receive four to six hours of daylight during the darkest months, but a village on the North Slope—such as Barrow, Alaska—will have *no daylight* for over two months.³¹

Requiring Alaska Plan participants to gather the necessary data just as the Alaska winter is beginning is not reasonable. Assuming it is even possible, it would be at increased expense due to inevitable delays in travel schedules and unplanned layovers away from home. More

³⁰ See generally Attachment 1 (Declaration of Jimmy Sipes) and Attachment 2 (Declaration of Robert Himschoot).

³¹ See Sunrise Sunset-Barrow, Alaska, <https://sunrise-sunset.org/us/barrow-ak/2017/11>.

importantly, it would create unnecessary safety risks for the personnel involved that some carriers try to limit to situations when it is absolutely necessary. ATA respectfully submits that the Commission's legitimate data needs can be met at a level of accuracy and over a period of time that would allow for collection of essential data without these unnecessary costs and risks.

IV. CONCLUSION

ATA members remain firmly committed to bringing broadband to remote Alaska consistent with their performance commitments and accept that high-cost support always comes with reporting and compliance obligations. In this instance, the Bureaus have sought more information than is necessary for the tasks they need to perform and have imposed unreasonable burdens that could not in any event be met by March 1 without substantial additional expense and risks to safety of personnel.

ATA stands ready to discuss alternatives that provide the Commission with the information it needs at a reasonable cost to the Alaska Plan participants.

Respectfully submitted,

/s/

Christine O'Connor
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October 10, 2017

Attachment 1

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Connect America Fund – Alaska Plan)	WC Docket No. 16-271

DECLARATION OF JIMMY SIPES

1. My name is Jimmy Sipes. I serve as Vice President Network Services and Chief Engineer at General Communication, Inc. ("GCI"). I have been with the company for 35 years. My responsibilities include the engineering, operations and construction of the company's wireless, wireline, voice and data networks, including terrestrial microwave, satellite and fiber long haul transport systems.

2. A typical network architecture for mobile wireless infrastructure in a remote Alaska village involves placing one or two cell sites in or near the village. The cell sites are connected locally to an interexchange facility that carries traffic to and from the village.

3. Outside of Anchorage, Fairbanks, and Juneau, cell sites are typically near population centers, such as villages and some larger communities. Cell sites serving villages and communities usually are served by the same interexchange facility that services the local central office.

4. Some cell sites are located along highways rather than in villages and regional population centers. These cell sites are sometimes served by the fiber facilities within the highway rights-of ways when such fiber exists. Highways cover large expanses of unpopulated areas.

5. GCI does not have latitude and longitude coordinates to 7.6 meter accuracy for all of its cell sites or for end user locations. This information would have to be collected by sending a technician or surveyor to the site. Online mapping tools will not provide the required degree of accuracy, particularly in remote areas.

6. The costs of collecting coordinates would include the costs of traveling to the remote village by air, the man-hours of labor to collect the necessary information, and lodging and sustenance. Once the coordinates are collected, they would need to be formatted and associated with the other descriptive information required by the FCC's instructions.

7. The total cost to geocode cell sites, end user locations, and the other locations required in the FCC's instructions would be approximately \$10,000 for one remote village accessible only by air.

8. Out of consideration for the safety of GCI's technical personnel, the company tries to minimize the movement of personnel to the field during harsh winter conditions, including lack of daylight, unless it is necessary to maintain continuity of network operations.

I declare the foregoing to be true and correct to the best of my knowledge, under penalty of perjury.



Jimmy Sipes

10-10-2017

Date

Attachment 2

In the Matter of)
)
Connect America Fund – Alaska Plan) WC Docket No. 16-271

1. My name is Robert Himschoot. I serve as Chief Executive Officer and General Manager at Nushagak Electric and Telephone Cooperative. I have been with the company for five months. My experience in rural Alaska telecom maintenance spans twenty-six years, fifteen years of that as a traveling technician with statewide rural responsibilities.

2. Nushagak does not have latitude and longitude coordinates to 7.6-meter accuracy for all its Network Links and end user locations. This information would have to be collected by sending a technician to the locations. Online mapping tools will not provide the required degree of accuracy in all instances.

3. The costs of collecting coordinates would include those of travel to some remote villages by air, the man-hours of labor to collect the necessary information, lodging and sustenance.

4. The total cost to geocode network links, end user locations, and the other locations required in the FCC's instructions could be \$10,000 or more for some remote villages accessible only by air.

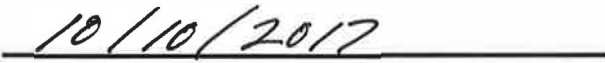
5. Out of consideration for the safety of Nushagak's personnel, the company does not send technicians to the field during harsh winter conditions unless it is necessary for

corrective maintenance or critical preventative maintenance. Construction, upgrades, and non-critical maintenance are scheduled outside of the winter months.

6. Nushagak may need to purchase equipment or engage contractual assistance to complete the mapping as currently required.

I declare the foregoing to be true and correct to the best of my knowledge, under penalty of perjury.


Robert Himschoot


Date

CERTIFICATE OF SERVICE

I, Remington Pool, certify that I have, on October 10, 2017, served a copy of the foregoing Petition for Reconsideration of Alaska Telephone Association by U.S. Mail postage prepaid to the addresses below:

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October 10, 2017